

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method for of enhancing the taste of a diluted beer comprising:
adding to a base beer with a mineral additive, the mineral additive including soluble compounds of the following minerals to the following ranges of final concentrations of the respective element in the diluted finished beer, ~~to enhance taste characteristics of the diluted beer when compared to a dilution solely with water:~~
group A minerals: calcium from 5.9 mg/L to 236 mg/L, and magnesium from 1.3 to 52mg/L
group B minerals: phosphorus from 3.0 to 360mg/L, potassium from 12mg/L to 480mg/L, silicon at 0.075mg/L to 30mg/L, sodium at 0.8 mg/L to 32mg/L and chlorine at 0.9mg/L to 36mg/L,
group C minerals: boron from 0 to 76 µg/L, chromium from 0 to 0.4 µg/L, cobalt from 0 to 0.4 µg/L, copper from 0 to 17.2 µg/L, iodine from 0 to 5.2 µg/L, lithium from 0 to 1.6 µg/L, manganese from 0 to 1.6 µg/L, molybdenum from 0 to 2.0 µg/L, nickel from 0 to 2.0 µg/L, selenium from 0 to 136 µg/L, tin from 0 to 01.6 µg/L, vanadium from 0 to 0.12 µg/L and zinc from 0 to 104 µg/L,
group D minerals: iron 0 to 20 µg/L,
wherein the mineral additive enhances taste characteristics of the diluted beer.
2. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, further including diluting of the base beer with the ~~addition~~ of water, the base beer being diluted to between 0.5% and 90% of its original strength.

3. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein at least some of the minerals of groups A, B, C and D are added in dry form.

4. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the diluted finished beer is a stout beer and the minerals are added to a final concentration in the diluted finished beer as follows:

group A minerals: calcium from 70mg/L to 143 mg/L, and magnesium from 15 mg/L to 32 mg/L

group B minerals: phosphorus ~~at least~~ 36 mg/L to 360 mg/L, potassium from 144 mg/L to 288 mg/L, silicon at 9 mg/L to 18 mg/L, sodium at 9 mg/L to 20 mg/L and chlorine at 11 mg/L to 22 mg/L,

group C minerals: boron from 23 to 46 µg/L, chromium from 0.12 to 0.24 µg/L, cobalt from 0.12 to 0.24 µg/L, copper from 5 to 11 µg/L, iodine from 1.5 to 3.5 µg/L, lithium from 0.45 to 1.00 µg/L, manganese from 0.45 to 1.00 µg/L, molybdenum from 0.6 to 1.2 µg/L, nickel from 0.6 to 1.2 µg/L, selenium from 40 to 82 µg/L, tin from 0.45 to 1.00 µg/L, vanadium from 0.035 to 0.075 µg/L and zinc from 31 to 62 µg/L,

group D minerals: iron 6 to 12 µg/L.

5. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the finished diluted beer is a pilsener beer and the minerals are added to a final concentration in the diluted finished beer as follows:

group A minerals: calcium from 188 mg/L to 224 mg/L, and magnesium from 41 mg/L to 50 mg/L

group B minerals: phosphorus ~~at least~~ 96 mg/L to 360mg/L, potassium from 380 mg/L to 460 mg/L, silicon at 24 mg/L to 29 mg/L, sodium at 25 mg/L to 31 mg/L and chlorine at 28 mg/L to 35 mg/L,

group C minerals: boron from 60 to 73 µg/L, chromium from 0.3 to 0.4 µg/L, cobalt from 0.3 to 0.4 µg/L, copper from 13 to 17 µg/L, iodine from 4 to 5 µg/L, lithium from 1.2 to 1.6 µg/L, manganese from 1.2 to 1.6 µg/L, molybdenum from 1.5 to 2.0 µg/L, nickel from 1.5 to 2.0 µg/L, selenium from 40 to 82 µg/L, tin from 1.2 to 1.6 µg/L, vanadium from 0.09 to 0.12 µg/L and zinc from 83 to 99 µg/L,

group D minerals: iron 16 to 19 µg/L.

6. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the diluted ~~finished~~ beer is a light beer and the minerals are added to a final concentration in the diluted ~~finished~~ beer as follows:

group A minerals: calcium from 11 mg/L to 21 mg/L, and magnesium from 2.6 to 4.6 mg/L

group B minerals: phosphorus at least 6 mg/L to 360 mg/L, potassium from 24 mg/L to 42 mg/L, silicon at 1.5 mg/L to 2.7 mg/L, sodium at 1.5 mg/L to 2.8 mg/L and chlorine at 1.8 mg/L to 3.2 mg/L,

group C minerals: boron from 3.5 to 7 µg/L, chromium from 0.02 to 0.035 µg/L, cobalt from 0.02 to 0.035 µg/L, copper from 0.8 to 1.6 µg/L, iodine from 0.25 to 0.5 µg/L, lithium from 0.08 to 0.14 µg/L, manganese from 0.08 to 0.14 µg/L, molybdenum from 0.1 to 0.18 µg/L, nickel from 0.1 to 0.18 µg/L, selenium from 6.8 to 12 µg/L, tin from 0.08 to 0.14 µg/L, vanadium from 0.006 to 0.011 µg/L and zinc from 5 to 9.5 µg/L,

group D minerals: iron 1 to 1.8 µg/L.

7. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the diluted ~~finished~~ beer is an extra light beer and the minerals are added to a final concentration in the diluted ~~finished~~ beer as follows:

group A minerals: calcium from 23 mg/L to 42 mg/L, and magnesium from 5 to 9.5 mg/L

group B minerals: phosphorus ~~at least about~~ 12 mg/L to 360 mg/L, potassium from 48 mg/L to 84 mg/L, silicon at 3 mg/L to 5.3 mg/L, sodium at 3.2 mg/L to 5.6 mg/L and chlorine at 3.6 mg/L to 6.3 mg/L,

group C minerals: boron from 7.5 to 14 µg/L, chromium from 0.04 to 0.07 µg/L, cobalt from 0.04 to 0.07 µg/L, copper from 1.7 to 3.2 µg/L, iodine from 0.5 to 1.0 µg/L, lithium from 0.15 to 0.3 µg/L, manganese from 0.15 to 0.3 µg/L, molybdenum from 0.2 to 0.35 µg/L, nickel from 0.2 to 0.35 µg/L, selenium from 13 to 24 µg/L, tin from 0.15 to 0.3 µg/L, vanadium from 0.012 to 0.021 µg/L and zinc from 10 to 19 µg/L,

group D minerals: iron 1 to 3.5 µg/L.

8. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the diluted finished beer is a medium strength beer and the minerals are added to a final concentration in the diluted finished beer as follows:

group A minerals: calcium from 11 mg/L to 23 mg/L, and magnesium from 2.6 to 5 mg/L

group B minerals: phosphorus ~~at least about~~ 6 mg/L to 360 mg/L, potassium from 24 mg/L to 48 mg/L, silicon at 1.5 mg/L to 3 mg/L, sodium at 1.6 mg/L to 3.2 mg/L and chlorine at 6.8 mg/L to 3.6 mg/L,

group C minerals: boron from 3.5 to 8 µg/L, chromium from 0.02 to 0.04 µg/L, cobalt from 0.02 to 0.04 µg/L, copper from 0.8 to 1.8 µg/L, iodine from 0.25 to 0.5 µg/L, lithium from 0.08 to 0.15 µg/L, manganese from 0.08 to 0.15 µg/L, molybdenum from 0.1 to 0.2 µg/L, nickel from 0.1 to 0.2 µg/L, selenium from 6.8 to 13 µg/L, tin from 0.08 to 0.15 µg/L, vanadium from 0.005 to 0.012 µg/L and zinc from 5 to 10 µg/L,

group D minerals: iron 1 to 2 µg/L.

9. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the diluted finished beer is a full strength beer and the minerals are added to a final concentration in the diluted finished beer as follows:

group A minerals: calcium from 17mg/L to 36 mg/L, and magnesium from 3.9 to 7.8 mg/L

group B minerals: phosphorus at least about 9mg/L, potassium from 36 mg/L to 72 mg/L, silicon at 2.2 mg/L to 4.5 mg/L, sodium at 2.4 mg/L to 4.8 mg/L and chlorine at 2.5 mg/L to 5.5 mg/L,

group C minerals: boron from 5.5 to 11.5 µg/L, chromium from 0.03 to 0.06 µg/L, cobalt from 0.03 to 0.06 µg/L, copper from 1.2 to 2.6 µg/L, iodine from 0.3 to 0.8 µg/L, lithium from 0.12 to 0.24 µg/L, manganese from 0.12 to 0.24 µg/L, molybdenum from 0.15 to 0.3 µg/L, nickel from 0.15 to 0.3 µg/L, selenium from 10 to 21 µg/L, tin from 0.12 to 0.24 µg/L, vanadium from 0.009 to 0.02 µg/L and zinc from 7.5 to 16 µg/L,

group D minerals: iron 1.5 to 3 µg/L.

10. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the mineral additive has elements present in certain proportions by element weight as follows:

group A; calcium from 25 to 82 mg/L and magnesium from 6 to 18 mg/L,

group B; potassium from 50 to 180 mg/L, silicon from 0.45 to 1.5 mg/L, sodium from 3 to 30 mg/L, chlorine from 3 to 28 mg/L,

group C; boron from 0 to 0.060 µg/L, chromium from 0 to 0.0005 µg/L, cobalt from 0 to 0.0005 µg/L, copper from 0 and 0.012 µg/L, iodine from 0 to 0.006 µg/L, lithium from 0 to 0.0015 µg/L, manganese from 0 to 0.0015 µg/L, molybdenum from 0 to 0.0015 µg/L, nickel from 0 to 0.0005 µg/L, selenium from 0 to 0.100 µg/L, tin from 0 to 0.0015 µg/L, vanadium from 0 to 0.1 µg/L and zinc from 0 and 0.100 µg/L,

group D: Iron from 0 to 0.020 µg/L,

11. (Currently amended)The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 10, wherein a range of proportions of the group A elements

in the mineral additive preparation are as follows, calcium from 44 to 74 mg/L and magnesium from 10 to 16 mg/L.

12. (Currently amended)The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 11, wherein the proportion of calcium is about 59 mg/L and the ~~most-preferable~~ proportion of magnesium is about 13 mg/L.

13. (Currently amended)The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 10, wherein a range of proportions of the group B elements in the mineral additive preparation are as follows; potassium from 80 to 150 mg/L, silicon from 0.55 to 1.0 mg/L, sodium from 5 to 15 mg/L, chlorine from 5 to 14 mg/L.

14. (Currently amended)The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 13, wherein the proportion of each group B element is as follows; potassium is about 120 mg/L, silicon is about 0.75 mg/L, sodium is about 8 mg/L, and chlorine is about 9 mg/L.

15. (Currently amended)The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 10, wherein a range of proportions of the group C elements in the mineral additive preparation are as follows; boron from 0.010 to 0.040 μg/L, chromium from 0.00005 to 0.0002 μg/L, cobalt from 0.00005 to 0.0002 μg/L, copper from 2 to 9 μg/L, iodine from 0.0004 to 0.0025 μg/L, lithium from 0.0001 to 0.0010 μg/L, manganese from 0.0001 to 0.0010 μg/L, molybdenum from 0.0001 to 0.0010 μg/L, nickel from 0.00005 to 0.0002 μg/L, selenium from 0.010 to 0.070 μg/L, tin from 0.0001 to 0.0010 μg/L, vanadium from 0.00001 to 0.00007 μg/L, and zinc from 0.010 to 0.070 μg/L.

16. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 15, wherein ~~the a most preferred~~ proportion of each group C element is as follows; boron is about 0.019 $\mu\text{g/L}$, chromium is about 0.0001 $\mu\text{g/L}$, cobalt is about 0.0001 $\mu\text{g/L}$, copper is about 0.0043 $\mu\text{g/L}$, iodine is about 0.0013 $\mu\text{g/L}$, lithium is about 0.0004 $\mu\text{g/L}$, manganese is about 0.0004 $\mu\text{g/L}$, molybdenum is about 0.0005 $\mu\text{g/L}$, nickel is about 0.0001 $\mu\text{g/L}$, selenium is about 0.034 $\mu\text{g/L}$, tin is about 0.0004 $\mu\text{g/L}$, vanadium is about 0.00003 $\mu\text{g/L}$, and zinc is about 0.026 $\mu\text{g/L}$.

17. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 10, wherein a range of proportions of the group D element present in the mineral additive preparation is as follows: iron is from 0.002 to 0.012 $\mu\text{g/L}$.

18. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 17, wherein the proportion of iron is about 0.005 $\mu\text{g/L}$.

19. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the group A minerals are made up separately and a buffer or acid is added to the group A minerals to adjust the pH of the group A minerals.

20. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein the pH of the finished diluted beer is ~~adjusted to~~ be in the range of 3.5 through to 5.0.

21. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 20, wherein the pH of the diluted finished beer is ~~no higher than~~ in the range of 3.5 to 4.7.

22. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 20₁ wherein the pH of the diluted ~~finished~~ beer is in the range of about 3.8 to about 4.5.
23. (Currently amended)The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 20₁ wherein the pH of a preparation of either the group A minerals or the mineral additive preparation is brought below about 4.5, to bring the suspension of Ca and Mg into solution.
24. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 22₁ wherein the pH is adjusted by an ~~acceptable~~ organic or mineral acid.
25. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 24₁ wherein the acid is phosphoric acid.
26. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 24₁ wherein the pH is adjusted to about 4.0.
27. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 2₁ wherein the dilution is ~~less than about~~ between 0.5% and 50%.
28. (Currently amended)The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 2₁ wherein dilution of the base beer is ~~greater than~~ between about 20% and 90% and the mineral additive preparation is added to the base beer before gassing with carbon dioxide.

29. (Currently amended) The method ~~for~~ of enhancing the taste of a diluted beer with a mineral additive according to claim 1₁ wherein dilution of the base beer is ~~less than~~ between 0.5% and about 5% the mineral additive is added after the base beer has been diluted with water and gassed with carbon dioxide.
30. (Currently amended) The method ~~for~~ of enhancing the taste of a diluted beer with a mineral additive according to claim 29₁ wherein one or more of the minerals is added in dry form.
31. (Currently amended) The method ~~for~~ of enhancing the taste of a diluted beer with a mineral additive according to claim 1₁ wherein calcium is provided or partially provided in the form of calcium hydroxide $\text{Ca}(\text{OH})_2$ and magnesium is provided or partially provided in the form of $\text{Mg}(\text{OH})_2$ (magnesium hydroxide).
32. (Currently amended) The method ~~for~~ of enhancing the taste of a diluted beer with a mineral additive according to claim 1₁ wherein:
- phosphorous is provided or partially provided in the form of KH_2PO_4 (monobasic potassium phosphate);
 - potassium is provided or partially provided in the form of KH_2PO_4 (monobasic potassium phosphate) or KHCO_3 (potassium bicarbonate);
 - silicon is provided in the form of $\text{Na}_2\text{SiO}_3 \cdot 5\text{H}_2\text{O}$ (sodium metasilicate);
 - sodium is provided wholly or partially in a form selected from the group consisting of NaHCO_3 (sodium bicarbonate), $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$ (sodium tetraborate), NaCl (sodium chloride), $\text{Na}_2\text{MoO}_4 \cdot 2\text{H}_2\text{O}$ (sodium molybdate), $\text{Na}_2\text{SeO}_4 \cdot 10\text{H}_2\text{O}$ (sodium selenate), Na_2SeO_3 (sodium selenite), $\text{Na}_2\text{SiO}_3 \cdot 5\text{H}_2\text{O}$ (sodium silicate), Na_2SO_4 and $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$ (sodium sulphate); and

chlorine is provided wholly or partially in a form selected from the group consisting of NaCl (sodium chloride), KCl (potassium chloride), CaCl_2 (calcium chloride) and MgCl_2 (magnesium chloride).

33. (Currently amended) The method ~~for~~ of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein, if present in the ~~manufactured mineral water base beer~~,

boron is provided wholly or partially in a form selected from one of the group consisting of $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$ (sodium tetraborate) and $\text{K}_2\text{B}_4\text{O}_7 \cdot 5\text{H}_2\text{O}$ (potassium tetraborate);

chromium is provided in the form $\text{K}[\text{Cr}(\text{SO}_4)_2(\text{H}_2\text{O})_2] \cdot 6\text{H}_2\text{O}$ (chromium potassium sulphate);

cobalt is provided wholly or partially in a form selected from one or more of the group consisting of $\text{CoK}_2(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$ (cobaltous potassium sulphate) and $\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$ (cobalt sulphate);

copper is provided wholly or partially in a form selected from one or more of the group consisting of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ (cupric sulphate) and $\text{CuSeO}_4 \cdot 5\text{H}_2\text{O}$ (cupric selenate);

iodine is provided as (KI) potassium iodide;

lithium is provided wholly or partially in a form selected from one or more of the group consisting of $\text{Li}_2\text{SO}_4 \cdot \text{H}_2\text{O}$ (lithium sulphate), LiCl (lithium chloride) or $\text{Li}_2\text{SeO}_4 \cdot \text{H}_2\text{O}$ (lithium selenate);

manganese is provided wholly or partially in a form selected from one or more of the group consisting of $\text{MnSO}_4 \cdot \text{H}_2\text{O}$ (manganous sulphate) $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ (manganous chloride);

molybdenum is provided in the form of $\text{Na}_2\text{MoO}_4 \cdot 2\text{H}_2\text{O}$ (sodium molybdate); nickel is provided in the form of $\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$ (nickel sulphate);

selenium is provided wholly or partially in a form selected from one or more of the group consisting of $\text{Na}_2\text{SeO}_4 \cdot 10\text{H}_2\text{O}$ (sodium selenate), K_2SeO_4 (potassium selenate), MgSeO_4 (magnesium selenate) and Na_2SeO_3 (sodium selenite);

tin is provided in the form of Tin $\text{SnCl}_2 \cdot 2\text{H}_2\text{O}$ (stannous chloride);
vanadium is provided in the form of NH_4VO_3 (ammonium vanadate); and
zinc is provided wholly or partially in a form selected from one or more of the group
consisting of $\text{ZnSO}_4 \cdot \text{H}_2\text{O}$ and $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$ (zinc sulphate).

34. (Currently amended) The method for of enhancing the taste of a diluted beer with a mineral additive according to claim 1, wherein, if present in the ~~manufactured mineral water~~ base beer, iron is provided in the form of $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ (ferrous sulphate).

35. (Currently amended) A diluted beer made in accordance with claim 1.